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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

# THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

U. S. DEPARTMENT OF AGRICULTURE

Vol. III, No. 6

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St. Louis, Mo.

## SIX-MONTHS NO FATALITY RECORD SMASHED

### BULLETIN

As this issue of The Lineman goes to press, a wire was received from an Indiana system that a lineman was fatally burned by high voltage. The insurance company has been notified, the wire said. We'll give details in the July issue.

### THREE DEATHS DURING MAY

The REA no-fatality record of 194 days was broken during May. Linemen in Pennsylvania, Louisiana and Texas lost their lives. Not since October 1941 has such a tragedy occurred as three fatal accidents in one month. The no-fatality record started on October 22, 1942 and ended May 2, 1943 -- six months and 11 days.

### ELECTRIC SHOCK KILLS TWO

Two of the fatal accidents resulted from contact with energized primaries. The first occurred when a lineman, attempting to connect a 2300-volt three-phase tap, contacted an energized primary with his elbow. He was wearing rubber gloves.

The second electric shock fatality occurred when a lineman de-energized a line, climbed the pole and touched the top of the transformer bushing as he was about to install protective grounds. The primary jumper remained energized because the victim disconnected the wrong tap. The lineman wore no gloves. THE BURNS WERE ON THE HANDS.

### FALL KILLS THIRD

The third fatality occurred on a system that had been energized only two weeks. The lineman climbed a 45-foot pole to read the indicator on an oil circuit breaker. He did not wear his body belt or safety belt. He used one hand to shade his eyes from the sun, leaned away from the pole and lost his grip. Falling to the ground, he fractured his skull. There was no evidence of electric shock.

(See Editorial, Next Page)

### BACK ISSUES OF REA LINEMAN AVAILABLE

The article on page 3 refers to the campaign conducted by "The REA Lineman" in 1942 to reduce electric shock accidents. References to back issues will be helpful to you in the 1943 campaign.

A limited number of 1942 issues of "The REA Lineman" is available. Write the Editor at 420 Locust Street, St. Louis, Missouri for sufficient copies to complete your files.

BUY MORE BONDS FOR MORE BOMBS

Published monthly in the interest of Safety  
for Employees of REA Systems

David A. Fleming, Editor

## DEATH STRIKES THRICE

Three fatal accidents have occurred on REA lines this year -- all within six days of each other. After we have gone more than six months without a fatal accident, this is a serious blow.

But we cannot become discouraged. Now is the time to learn by these tragedies and redouble our efforts to fill in the gaps in our safety work.

Since December 1941 "The REA Lineman" has stressed THE BURNS WERE ON THE HANDS. For almost one and a half years we have driven home the need to "wear rubber gloves from the ground up unless protective grounds can be seen from the working position."

This campaign has been effective -- even if not perfect. Last year, in comparison with 1941, fatal accidents were reduced 74 percent. Last year at this time there had been three fatal accidents caused by electric shock -- all a result of BURNS ON THE HANDS.

This year to date there has been only one fatal accident where the BURNS WERE ON THE HANDS. This is progress -- and good progress -- but not *good enough*.

There are still some who do not agree with the policy of wearing rubber gloves from the ground up! No one can deny this practice would have prevented one of the recent fatal accidents. Every lineman must follow this practice, every manager must make it his business to enforce this practice if BURNS ON THE HANDS are to be eliminated. YOU MAY BE NEXT! You don't always get a second chance. Wear rubber gloves before it is too late.

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## HASTE WASTES - YOU

The death of the lineman that resulted when he lost his grip is the first of this type in our records.

It is probably not the first time an REA lineman climbed a pole without his safety belt.

This accident shows what CAN and DOES happen. You are undoubtedly trying to get the work done as quickly as possible. But haste makes waste. Haste and speed are different. It isn't worth the gamble -- losing your life to save one minute.

v - v

BUY AN EXTRA BOND THIS MONTH

## AROUND THE STATES WITH SAFETY AND JOB TRAINING

Co-ops in five states -- Alabama, Arkansas, North Carolina, Tennessee and -- Virginia -- are presenting resolutions to their board of directors regarding their participation in the Program. Early participation will enable each state to employ a supervisor before the Second National Supervisors Conference in St. Louis in the early fall. These Conferences help you, your Program and the National Program. Discuss joining the Program at the next Board Meeting.

\* \* \* \*

The Mississippi Committee expects to employ a supervisor in July.

\* \* \* \*

The Iowa Committee and the Engineering Extension Service at State College are now publishing the "Iowa REA Safety News" edited by James Morrow, Supervisor. This is an excellent idea. (All other states please note). The Iowa Cooperatives can help Jim out by sending him items or ideas that may be of interest.

\* \* \* \*

Two of the fatal accidents this year occurred in states not having the Safety and Job Training Program and the third occurred on a system that had not become a member of the Program.

\* \* \* \*

The Tennessee Committee is doing a splendid job and has gotten off to a good start. Congratulations! The Committee consists of the following board members, line foremen and managers: Board members, J.E. Walker, Monterey; Homer Hancock, Lebanon, C. E. Garner, Trenton; Line foreman, Donald Armstrong, Rogersville; Linemen, G. D. Rummage, Shelbyville; Ealston Varnell, Selmer; Managers, J.D. Griffin, Jefferson City; P. H.

(Turn to STATES page 4)



## AT YOUR SAFETY MEETING

Things to Discuss -- Electric Shock Accidents

No. 43-6

One REA staff member compares the Safety Unit to a person watching others come through a low doorway.

Let's say we watch you come through the door and bump your head. You may grumble a little, rub your head and think no more about it. But suppose we tell you that 33 out of the 39 persons who preceded you through the door also bumped their heads. With this information, you as well as we, can predict that four out of the next five persons who follow you through the door will suffer the same mishap.

So it is with electric shock accidents. By reading the table below, you can "watch the doorway" as we have watched it. You can predict, to quite an accurate degree, the frequency with which electric shock accidents will occur on REA system lines -- unless all of us act to stop them.

|           | 1939 | 1940 | 1941 | 1942 | 4-YEAR<br>TOTAL | 4-YEAR<br>AVERAGE | THIS<br>YEAR |
|-----------|------|------|------|------|-----------------|-------------------|--------------|
| January   | 3    | 2    | 1    | 0    | 6               | 1.50              | 0            |
| February  | 2    | 2    | 4    | 1    | 9               | 2.25              | 1            |
| March     | 3    | 3    | 2    | 2    | 10              | 2.50              | 2            |
| April     | 6    | 3    | 4    | 1    | 14              | 3.50              | 0            |
| May       | 0    | 6    | 7    | 1    | 14              | 3.50              | 3            |
| June      | 1    | 3    | 4    | 4    | 12              | 3.00              |              |
| July      | 7    | 6    | 9    | 7    | 28              | 7.00              |              |
| August    | 7    | 3    | 13   | 2    | 25              | 6.25              |              |
| September | 4    | 9    | 6    | 1    | 20              | 5.00              |              |
| October   | 1    | 2    | 6    | 4    | 13              | 3.25              |              |
| November  | 3    | 0    | 1    | 2    | 6               | 1.50              |              |
| December  | 3    | 2    | 4    | 2    | 11              | 2.75              |              |
| TOTAL     | 40   | 41   | 60   | 27   | 168             |                   |              |

Note how the accidents increase during summer. One electric shock accident during every four working days in July. August is almost as bad and September not much better. These three months, with October, account for more than 50 percent of all electric shock accidents.

This has happened every year. A united effort by us here in REA and you in the field can prevent it in 1943.

Compare 1942 with the preceding years. It is considerably better! Only three months rise above the average. August and September, usually bad months, are very good. Notice that 1943 boasts two out of the five months in which no electric shock accidents occurred.

Review the 1942 record on electric shock accidents and discuss why you did better.

In May 1942 we analyzed 1941's electric shock accident record and suggested preventive action. On July 1, Operations Memorandum 22.3 appeared and at the end of July an accident prevention bulletin appeared. Early in October another bulletin was distributed and, throughout the year, "The REA Lineman" stressed the electric shock problem.

1942 recommendations hold good today. They are merely: "Wear rubber gloves from the ground up and don't go near the phase wire if you cannot see a protective ground."

You made a remarkable record last year. Let's better it. Forewarned is forearmed! Post this table on your bulletin board. Don't let one of these monthly figures represent an accident to YOU! -3-

## IT COULD HAPPEN TO YOU

In addition to the four fatalities the following are lost time accidents reported in May.

1. A groundman trimming a felled tree, cut his foot as axe slashed through limb. The wound required 3 stitches.

2. A helper slipped while helping to lift a pole. He suffered torn ligaments of inguinal region, strain of sacroiliac joint, torn tissues and thrombosis of blood vessels.

3. A lineman incurred a sore shoulder when the truck in which he was riding was struck by another vehicle in a hard rain.

v - v - v

## TAKE SALT TABLETS

This is what happens when sweating robs the body of salt.

5% Loss -- Lassitude

10% Loss -- Loss of will to work

20% Loss -- Effort Forced

30% Loss -- Dizziness

40% Loss -- Heat Cramps

50% Loss -- Prostration

What did you do today

## TOWARD WINNING THE WAR?

The National Safety Council has announced the Annual Congress will be held in Chicago on October 5, 6, and 7th. If enough Cooperative employees plan to attend the Congress, we can arrange a special REA luncheon. Please write the Editor now if you plan to attend.

REPORT ALL ACCIDENTS  
TO REA

## TIPS FOR SAFE LINE WORK ON ACQUIRED PROPERTY

PREVENTION of electric shock accidents on acquired property presents many problems which cannot be solved by formula. However, here are some things to remember. If your acquired property operates at voltages *exceeding* 3000 volts to ground, you should be guided by our present theory of electric shock accident prevention. That is to work from a position where it is IMPOSSIBLE to touch an energized primary. DO NOT DEPEND on rubber protective equipment for protection against voltages exceeding 3000 volts to ground. If your acquired property operates at voltages NOT EXCEEDING 3000 VOLTS to ground and if you can apply our present practice of staying away from an energized phase, we recommend and urge you to use that method.

If you cannot follow our present practice and must work primaries, operating at potentials of less than 3000 volts, you will be *forced* to use rubber protective equipment. This is an exactly opposite approach. Instead of staying away from the primary the linemen may work near it, depending upon protective equipment to prevent contact. All primary wires, including short jumpers or taps, and as far as possible, the one being worked on, must be covered. In addition, all grounds or

### ACCIDENT FREQUENCY ON REA SYSTEMS - 5TH MONTH

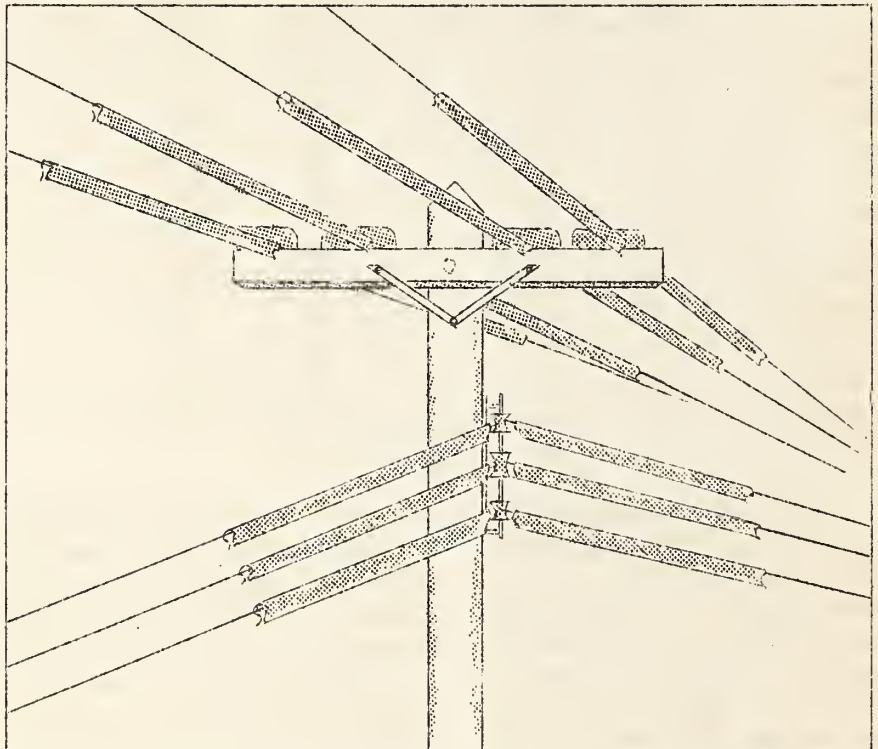
(Disabling injuries per 10,000  
miles of energized lines)

| REGION | THIS<br>YEAR | LAST<br>YEAR |
|--------|--------------|--------------|
| I      | 0.5 *        | 1.2          |
| II     | 1.5          | 0.0          |
| III    | 0.4          | 0.7 *        |
| IV     | 0.8 *        | 0.2          |
| V      | 0.3          | 0.5 *        |
| VI     | 0.6          | 0.0          |
| VII    | 1.5          | 0.0          |
| VIII   | 0.7 *        | 0.5          |
| IX     | 0.7          | 2.2          |
| X      | 0.3 *        | 2.2 *        |
| U.S.   | 0.7          | 0.7          |

\* One Fatality

### SAFETY AND JOB TRAINING INSTRUCTORS

Plan for the Second National REA Safety and Job Training Supervisors Conference to be held in St. Louis in the early Fall. Please write the Editor giving preferred dates and subjects you would like discussed.



### STATES (Cont'd.)

Tidwell, Centerville; E. H. Wright, Brownsville. The officers are Hancock, chairman; Armstrong, vice-chairman; Wright, secretary-treasurer.

\* \* \* \*

Ask your supervisor, regional operations engineer or operations field engineer about the contents of the National Safety Council's engineering summary pamphlet.

Did you send REA a copy of the accident report you made to your insurance company?

secondary wires which the linemen may contact while working on a primary, must also be covered with protective equipment.

Using opposite theories of prevention on the same cooperative may appear confusing but the type of construction itself will give some warning.

A word of caution to the board presidents, directors and managers. A man with considerable experience in line work recently wrote: "Finally, as regards the use of rubber protective equipment, it has been our experience as well as that available to us from other operating companies that injury or fatality to a workman has **never** occurred from the failure of properly tested and inspected rubber goods. Accidents that have occurred resulted from failure to use the equipment supplied, misuse of the equipment, or from failure of the man to follow basic, sound practices in carrying on his work."

Management shares with us the responsibility for doing all within our power to see that these safe practices are enforced. It will be a bigger job -- and tougher job than "wearing rubber gloves from the ground up."